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LOGINID:ssptacrs1614

PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

* * * * * * * * * * Welcome to STN International * * * * * * * * *

NEWS 1 Web Page for STN Seminar Schedule - N. America
NEWS 2 AUG 06 CAS REGISTRY enhanced with new experimental property tags
NEWS 3 AUG 06 FSTA enhanced with new thesaurus edition
NEWS 4 AUG 13 CA/Caplus enhanced with additional kind codes for granted patents
NEWS 5 AUG 20 CA/Caplus enhanced with CAS indexing in pre-1907 records
NEWS 6 AUG 27 Full-text patent databases enhanced with predefined patent family display formats from INPADOCDB
NEWS 7 AUG 27 USPATOLD now available on STN
NEWS 8 AUG 28 CAS REGISTRY enhanced with additional experimental spectral property data
NEWS 9 SEP 07 STN AnaVist, Version 2.0, now available with Derwent World Patents Index
NEWS 10 SEP 13 FORIS renamed to SOFIS
NEWS 11 SEP 13 INPADOCDB enhanced with monthly SDI frequency
NEWS 12 SEP 17 CA/Caplus enhanced with printed CA page images from 1967-1998
NEWS 13 SEP 17 Caplus coverage extended to include traditional medicine patents
NEWS 14 SEP 24 EMBASE, EMBAL, and LEMBASE reloaded with enhancements
NEWS 15 OCT 02 CA/Caplus enhanced with pre-1907 records from Chemisches Zentralblatt
NEWS 16 OCT 19 BEILSTEIN updated with new compounds
NEWS 17 NOV 15 Derwent Indian patent publication number format enhanced
NEWS 18 NOV 19 WPIX enhanced with XML display format
NEWS 19 NOV 30 ICSP reloaded with enhancements
NEWS 20 DEC 04 LINPADOCDB now available on STN
NEWS 21 DEC 14 BEILSTEIN pricing structure to change
NEWS 22 DEC 17 USPATOLD added to additional database clusters
NEWS 23 DEC 17 IMSDRUGCONF removed from database clusters and STN
NEWS 24 DEC 17 DGENE now includes more than 10 million sequences
NEWS 25 DEC 17 TOXCENTER enhanced with 2008 MeSH vocabulary in MEDLINE segment
NEWS 26 DEC 17 MEDLINE and LMEDLINE updated with 2008 MeSH vocabulary
NEWS 27 DEC 17 CA/Caplus enhanced with new custom IPC display formats
NEWS 28 DEC 17 STN Viewer enhanced with full-text patent content from USPATOLD
NEWS 29 JAN 02 STN pricing information for 2008 now available
NEWS 30 JAN 16 CAS patent coverage enhanced to include exemplified prophetic substances
NEWS 31 JAN 28 USPATFULL, USPAT2, and USPATOLD enhanced with new custom IPC display formats
NEWS 32 JAN 28 MARPAT searching enhanced
NEWS 33 JAN 28 USGENE now provides USPTO sequence data within 3 days of publication
NEWS 34 JAN 28 TOXCENTER enhanced with reloaded MEDLINE segment

NEWS 35 JAN 28 MEDLINE and LMEDLINE reloaded with enhancements
NEWS 36 FEB 08 STN Express, Version 8.3, now available

NEWS EXPRESS FEBRUARY 08 CURRENT WINDOWS VERSION IS V8.3,
AND CURRENT DISCOVER FILE IS DATED 24 JANUARY 2008

NEWS HOURS STN Operating Hours Plus Help Desk Availability
NEWS LOGIN Welcome Banner and News Items
NEWS IPC8 For general information regarding STN implementation of IPC 8

Enter NEWS followed by the item number or name to see news on that specific topic.

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FILE 'HOME' ENTERED AT 09:04:13 ON 20 FEB 2008

=> file registry
 COST IN U.S. DOLLARS
 FULL, ESTIMATED COST

| | SINCE FILE
ENTRY | TOTAL
SESSION |
|--|---------------------|------------------|
| | 0.21 | 0.21 |

FILE 'REGISTRY' ENTERED AT 09:04:24 ON 20 FEB 2008
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
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STRUCTURE FILE UPDATES: 19 FEB 2008 HIGHEST RN 1004621-14-0
DICTIONARY FILE UPDATES: 19 FEB 2008 HIGHEST RN 1004621-14-0

New CAS Information Use Policies - enter HELP USAGETERMS for details

TSCA INFORMATION NOW CURRENT THROUGH January 9, 2008

Please note that search-term pricing does apply when conducting Smart SELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

<http://www.cas.org/support/stn/gen/stndoc/properties.html>

=> file registry
 COST IN U.S. DOLLARS

| | SINCE FILE | TOTAL |
|---------------------|------------|---------|
| | ENTRY | SESSION |
| FULL ESTIMATED COST | 0.46 | 0.67 |

FILE 'REGISTRY' ENTERED AT 09:04:55 ON 20 FEB 2008
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STRUCTURE FILE UPDATES: 19 FEB 2008 HIGHEST RN 1004621-14-0
DICTIONARY FILE UPDATES: 19 FEB 2008 HIGHEST RN 1004621-14-0

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH January 9, 2008.

Please note that search-term pricing does apply when conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

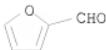
<http://www.cas.org/support/stndoc/properties.html>

```
=> e hydroxymethylfurfural
E1      1    HYDROXYMETHYLFURATRIZINE/BI
E2      3    HYDROXYMETHYLFURFUR/BI
E3      2 --> HYDROXYMETHYLFURFURAL/BI
E4      1    HYDROXYMETHYLFURFURALALDEHYDE/BI
E5      1    HYDROXYMETHYLFURFURALDEHYDE/BI
E6      1    HYDROXYMETHYLFURFUROL/BI
E7      1    HYDROXYMETHYLFURFURYL/BI
E8      1    HYDROXYMETHYLFURME/BI
E9      1    HYDROXYMETHYLFURMETHI/BI
E10     1    HYDROXYMETHYLFURMETHIDE/BI
E11     2    HYDROXYMETHYLFURO/BI
E12     1    HYDROXYMETHYLGUTAM/BI

=> s e3
L1      2 HYDROXYMETHYLFURFURAL/BI

=> d 11 1-2

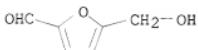
L1  ANSWER 1 OF 2  REGISTRY  COPYRIGHT 2008 ACS on STN
RN  25376-49-2  REGISTRY
ED  Entered STN: 16 Nov 1984
CN  2-Furancarboxaldehyde, (hydroxymethyl)- (9CI)  (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN  2-Furaldehyde, (hydroxymethyl)- (7CI, 8CI)
OTHER NAMES:
CN  Hydroxymethylfurfural
MF  C6 H6 O3
CI  IDS, COM
LC  STN Files: AGRICOLA, ANABSTR, BIOSIS, BIOTECHNO, CA, CAOLD, CAPLUS,
     CASREACT, DDFU, DETHERM*, DRUGU, EMBASE, IPA, PIRA, PROMT, TOXCENTER,
     USPATOLE
(*File contains numerically searchable property data)
```



D1-CH₂-OH

333 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
333 REFERENCES IN FILE CAPLUS (1907 TO DATE)
17 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

L1 ANSWER 2 OF 2 REGISTRY COPYRIGHT 2008 ACS on STN
RN 67-47-0 REGISTRY
ED Entered STN: 16 Nov 1984
CN 2-Furancarboxaldehyde, 5-(hydroxymethyl)- (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN 2-Furaldehyde, 5-(hydroxymethyl)- (8CI)
OTHER NAMES:
CN 2-Hydroxymethyl-5-furfural
CN 5-(Hydroxymethyl)-2-furaldehyde
CN 5-(Hydroxymethyl)-2-furancarbonal
CN 5-(Hydroxymethyl)-2-furancarboxaldehyde
CN 5-(Hydroxymethyl)-2-furfural
CN 5-(Hydroxymethyl)-2-furfuraldehyde
CN 5-(Hydroxymethyl)furfural
CN 5-Hydroxymethyl-2-formylfuran
CN 5-Hydroxymethylfuraldehyde
CN 5-Hydroxymethylfuran-2-aldehyde
CN 5-Hydroxymethylfurfuraldehyde
CN 5-Hydroxymethylfurfurrol
CN 5-Oxymethylfurfurole
CN HMF
CN Hydroxymethylfurfural
CN Hydroxymethylfurfuralaldehyde
CN Hydroxymethylfurfuralaldehyde
CN NSC 40738
DR 76330-16-0
MF C6 H6 O3
CI COM
LC STN Files: AGRICOLA, ANABSTR, AQUIRE, BEILSTEIN*, BIOSIS, BIOTECHNO, CA,
CABA, CAOLD, CAPLUS, CASREACT, CBNB, CHEMCATS, CHEMINFORMRX, CHEMLIST,
CIN, CSCHEM, CSNB, EMBASE, GMELIN*, IFICDB, IFIPAT, IFIUDB, IPA,
MEDLINE, MRCK*, NAPRALERT, PIRA, PROMT, RTECS*, SPECINFO, TOXCENTER,
USPAT2, USPATFULL, USPATOLD
(*File contains numerically searchable property data)
Other Sources: DSL**, EINECS**, TSCA**
(**Enter CHEMLIST File for up-to-date regulatory information)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

3100 REFERENCES IN FILE CA (1907 TO DATE)

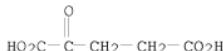
36 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
3109 REFERENCES IN FILE CAPLUS (1907 TO DATE)
51 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

=> e alphaketoglutaric
E1 1 ALPHAIV/BI
E2 1 ALPHAJEL/BI
E3 0 --> ALPHAKETOGLUTARIC/BI
E4 1 ALPHAKIL/BI
E5 3 ALPHAL/BI
E6 2 ALPHALB/BI
E7 1 ALPHALIN/BI
E8 2 ALPHALOY/BI
E9 1 ALPHALUX/BI
E10 4 ALPHAM/BI
E11 7 ALPHAMI/BI
E12 1 ALPHAMAL/BI

=> s 328-50-7
L2 1 328-50-7
(328-50-7/RN)

=> d

L2 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2008 ACS on STN
RN 328-50-7 REGISTRY
ED Entered STN: 16 Nov 1984
CN Pentanedioic acid, 2-oxo- (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Glutaric acid, 2-oxo- (8CI)
OTHER NAMES:
CN α-keto-Glutaric acid
CN α-Ketoglutaric acid
CN α-Oxoglutaric acid
CN α-Oxopentanedioic acid
CN 2-Ketoglutaric acid
CN 2-Oxo-1,5-pentanedioic acid
CN 2-Oxoglutaric acid
CN 2-Oxopentanedioic acid
CN NSC 17391
DR 27175-99-1
MF C5 H6 O5
CI COM
LC STN Files: AGRICOLA, ANABSTR, BEILSTEIN*, BIOSIS, BIOTECHNO, CA, CABA,
CAOLD, CAPLUS, CASREACT, CHEMCATS, CHEMINFORMRX, CHEMLIST, CSCHEM, CSNB,
DDFU, DETHERM*, DRUGU, EMBASE, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE,
MRCK*, MSDS-OHS, NAPRALERT, PROMT, RTECS*, SYNTHLINE, TOXCENTER, USPAT2,
USPATFULL, USPATOLD
(*File contains numerically searchable property data)
Other Sources: DSL**, EINECS**, TSCA**
(**Enter CHEMLIST File for up-to-date regulatory information)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

8979 REFERENCES IN FILE CA (1907 TO DATE)
166 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
8997 REFERENCES IN FILE CAPLUS (1907 TO DATE)
15 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

=> e dehydroascorbic
E1 1 DEHYDROASCORBATE/BI
E2 124 DEHYDROASCORBATE/BI
E3 23 --> DEHYDROASCORBIC/BI
E4 1 DEHYDROASCRO/BI
E5 1 DEHYDROASCROBI/BI
E6 1 DEHYDROASCROBIC/BI
E7 3 DEHYDROASIMILO/BI
E8 3 DEHYDROASIMILOBI/BI
E9 3 DEHYDROASIMILOBINE/BI
E10 1 DEHYDROASPART/BI
E11 1 DEHYDROASPARTAME/BI
E12 2 DEHYDROASPARTIC/BI

=> s e3
L3 23 DEHYDROASCORBIC/BI

=> file caplus
COST IN U.S. DOLLARS SINCE FILE TOTAL
ENTRY SESSION
FULL ESTIMATED COST 18.60 19.27

FILE 'CAPLUS' ENTERED AT 09:08:09 ON 20 FEB 2008
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FILE COVERS 1907 - 20 Feb 2008 VOL 148 ISS 8
FILE LAST UPDATED: 19 Feb 2008 (20080219/ED)

Effective October 17, 2005, revised CAS Information Use Policies apply.
They are available for your review at:

<http://www.cas.org/infopolicy.html>

=> s (11 or hmf of hydroxymethylfurfur?) and (12 or ketoglut?) and ?methionine
3362 L1
1257 HMF
29 HMFS
1275 HMF
(HMF OR HMFS)
2447 HYDROXYMETHYLFURFUR?
17 HMF OF HYDROXYMETHYLFURFUR?

(HMF (1W) HYDROXYMETHYLFURFUR?)

8997 L2
 13225 KETOGLUT?
 101086 ?METHIONINE
 L4 1 (L1 OR HMF OF HYDROXYMETHYLFURFUR?) AND (L2 OR KETOGLUT?) AND
 ?METHIONINE

=> d 14

L4 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2008 ACS on STN
 AN 2004:467738 CAPLUS
 DN 141:17591
 TI Agent having a destructive effect on malignant tumors and method for the production
 IN Groke, Karl; Herwig, Ralf
 PA C.Y.L. Handelsges. m.b.H., Austria; Ferdinand, Peter
 SO PCT Int. Appl., 35 pp.
 CODEN: PIXXD2
 DT Patent
 LA German
 FAN.CNT 1

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|--|--|----------|-----------------|----------|
| PI WO 2004047832 | A1 | 20040610 | WO 2003-EP50712 | 20031013 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE,
GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KE, KR, KZ, LC, LK,
LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ,
OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,
TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | | |
| RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,
FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR,
BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| AT 2002001778 | A | 20040815 | AT 2002-1778 | 20021127 |
| AT 412447 | B | 20050325 | | |
| CA 2507273 | A1 | 20040610 | CA 2003-2507273 | 20031013 |
| AU 2003285351 | A1 | 20040618 | AU 2003-285351 | 20031013 |
| EP 1565176 | A1 | 20050824 | EP 2003-778338 | 20031013 |
| EP 1565176 | B1 | 20060524 | | |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK | | | | |
| JP 2006508998 | T | 20060316 | JP 2004-554531 | 20031013 |
| AT 326958 | T | 20060615 | AT 2003-778338 | 20031013 |
| PT 1565176 | T | 20061031 | PT 2003-778338 | 20031013 |
| ES 2268452 | T3 | 20070316 | ES 2003-778338 | 20031013 |
| US 2006292218 | A1 | 20061228 | US 2006-536777 | 20060907 |
| PRAI AT 2002-1778 | A | 20021127 | | |
| EP 2003-778338 | A | 20031013 | | |
| WO 2003-EP50712 | W | 20031013 | | |
| RE.CNT 4 | THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT | | | |

=> s (l1 or hmf of hydroxymethylfurfur?) and (l2 or ketoglut?)
 3362 L1
 1257 HMF
 29 HMFS
 1275 HMF
 (HMF OR HMFS)
 2447 HYDROXYMETHYLFURFUR?
 17 HMF OF HYDROXYMETHYLFURFUR?

(HMF (1W) HYDROXYMETHYLFURFUR?)

8997 L2
 13225 KETOGLUT?
 L5 10 (L1 OR HMF OF HYDROXYMETHYLFURFUR?) AND (L2 OR KETOGLUT?)

=> d 15 ibib abs 1-10

L5 ANSWER 1 OF 10 CAPLUS COPYRIGHT 2008 ACS on STN
 ACCESSION NUMBER: 2007:1140948 CAPLUS
 DOCUMENT NUMBER: 147:420129
 TITLE: Use of α -ketoglutaric acid and
 5-hydroxymethylfurfural for reducing oxidative stress
 INVENTOR(S): Moser, Peter Michael; Greilberger, Joachim; Maier,
 Alfred; Juan, Heinz; Buecherl-Harrer, Christian;
 Kager, Ernst
 PATENT ASSIGNEE(S): C.Y.L. Pharmazeutika GmbH, Austria
 SOURCE: Eur. Pat. Appl., 7pp.
 CODEN: EPXXDW
 DOCUMENT TYPE: Patent
 LANGUAGE: German
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|--|---|-----------------|------------|
| EP 1842536 | A1 | 20071010 | EP 2007-104493 | 20070320 |
| R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
IS, IT, LI, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR,
AL, BA, HR, MK, YU | | | | |
| AT 503385 | A1 | 20071015 | AT 2006-464 | 20060320 |
| PRIORITY APPLN. INFO.: | | | AT 2006-464 | A 20060320 |
| AB | The invention discloses the use of α -ketoglutaric acid and
5-hydroxymethylfurfural for the preparation of a medicament for the treatment
and prevention of oxidative stress in humans and animals, particularly for
the reduction of reactive oxygen and nitrogen species and simultaneously
increasing antioxidant capacity. The compds. of the invention can be used
for the improvement of general conditions and improving performance. | | | |
| REFERENCE COUNT: | 5 | THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT | | |

L5 ANSWER 2 OF 10 CAPLUS COPYRIGHT 2008 ACS on STN
 ACCESSION NUMBER: 2007:758613 CAPLUS
 DOCUMENT NUMBER: 147:197593
 TITLE: Using tolerance intervals in pre-study validation of
 analytical methods to predict in-study results
 AUTHOR(S): Rozet, Eric; Hubert, Cedric; Ceccato, Attilio; Dewe,
 Waltherie; Ziemons, Eric; Moonen, Francois; Michail,
 Karim; Wintersteiger, Reinhold; Streel, Bruno;
 Boulanger, Bruno; Hubert, Philippe
 CORPORATE SOURCE: Laboratory of Analytical Chemistry, Bioanalytical
 Chemistry Research Unit, Institute of Pharmacy, CHU,
 University of Liege, Liege, B-4000, Belg.
 SOURCE: Journal of Chromatography, A (2007), 1158(1-2),
 126-137
 CODEN: JCRAEY; ISSN: 0021-9673
 PUBLISHER: Elsevier B.V.
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB It is recognized that the purpose of validation of anal. methods is to
 demonstrate that the method is suited for its intended purpose.
 Validation is not only required by regulatory authorities, but is also a
 decisive phase before the routine use of the method. For a quant. anal.

method the objective is to quantify the target analytes with a known and suitable accuracy. For that purpose, first, a decision about the validity of the method based on prediction is proposed: a method is declared proper for routine application if it is considered that most of the future results generated will be accurate enough. This can be achieved by the " β -expectation tolerance interval" (accuracy profile) as the decision tool to assess the validity of the anal. method. Moreover, the concept of "fit-for-purpose" is also proposed here to select the most relevant response function as calibration curve, i.e. choosing a response function based solely on the predicted results this model will allow to obtain. This paper reports 4 case studies where the results obtained with quality control samples in routine were compared to predictions made in the validation phase. Predictions made using the " β -expectation tolerance interval" are shown to be accurate and trustful for decision making. It is therefore suggested that an adequate way to conciliate both the objectives of the anal. method in routine anal. and those of the validation step consists in taking the decision about the validity of the anal. method based on prediction of the future results using the most appropriate response function curve, i.e. the fit-for-future-purpose concept.

REFERENCE COUNT: 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 3 OF 10 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2006:1326164 CAPLUS
DOCUMENT NUMBER: 146:134507
TITLE: Development and validation of a liquid chromatographic method for the determination of hydroxymethylfurfural and alpha-ketoglutaric acid in human plasma
AUTHOR(S): Michail, K.; Juan, H.; Maier, A.; Matzi, V.; Greilberger, J.; Wintersteiger, R.
CORPORATE SOURCE: Institute of Pharmaceutical Sciences, University of Graz, Austria
SOURCE: Analytica Chimica Acta (2007), 581(2), 287-297
CODEN: ACACAM; ISSN: 0003-2670
PUBLISHER: Elsevier B.V.
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Hydroxymethylfurfural (HMF) and alpha-ketoglutaric acid (KG) have been recently investigated as potential cancer cell damaging agents. We herein report for the first time a validated quant. assay for their simultaneous determination in human plasma which is amenable to be applied in the future screening of the target compds. in human probands in order to properly design a targeted chemotherapeutic regimen for certain types of malignant tumors. A simple liquid chromatog. method in conjunction to derivatization after a two-step optimized solid phase clean-up procedure is described. The method is based on the reaction of HMF and KG with 2-nitrophenylhydrazine or 2,4-dinitrophenylhydrazine in an aqueous environment. Reaction conditions were studied with respect to pH, reagent volume, reaction temperature and time. Exact testing of such parameters beside careful selection of the mobile phase composition rendered feasible the quantification of the chemical significantly differing analytes along a single chromatog. run. The formed derivs. could be separated isocratically by reversed-phase LC on a C8-column. Detection in the UV and in the visible range is possible. Results showed good recovery and reproducibility with detection limits ($S/N = 3$) down to 2 pmol analyte on column. Resolution of the syn and anti geometric isomers of the HMF and KG derivs. is possible. The isomeric ratio in relation to the reaction pH is discussed.

REFERENCE COUNT: 46 THERE ARE 46 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 4 OF 10 CAPLUS COPYRIGHT 2008 ACS on STN
 ACCESSION NUMBER: 2004:467738 CAPLUS
 DOCUMENT NUMBER: 141:17591
 TITLE: Agent having a destructive effect on malignant tumors
 and method for the production
 INVENTOR(S): Groke, Karl; Herwig, Ralf
 PATENT ASSIGNEE(S): C.Y.L. Handelsges. m.b.H., Austria; Ferdinand, Peter
 SOURCE: PCT Int. Appl., 35 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: German
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|--|----------|-----------------|------------|
| WO 2004047832 | A1 | 20040610 | WO 2003-EP50712 | 20031013 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | | |
| RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| AT 2002001778 | A | 20040815 | AT 2002-1778 | 20021127 |
| AT 412447 | B | 20050325 | | |
| CA 2507273 | A1 | 20040610 | CA 2003-2507273 | 20031013 |
| AU 2003285351 | A1 | 20040618 | AU 2003-285351 | 20031013 |
| EP 1565176 | A1 | 20050824 | EP 2003-778338 | 20031013 |
| EP 1565176 | B1 | 20060524 | | |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK | | | | |
| JP 2006508998 | T | 20060316 | JP 2004-554531 | 20031013 |
| AT 326958 | T | 20060615 | AT 2003-778338 | 20031013 |
| PT 1565176 | T | 20061031 | PT 2003-778338 | 20031013 |
| ES 2268452 | T3 | 20070316 | ES 2003-778338 | 20031013 |
| US 2006292218 | A1 | 20061228 | US 2006-536777 | 20060907 |
| PRIORITY APPLN. INFO.: | | | AT 2002-1778 | A 20021127 |
| | | | EP 2003-778338 | A 20031013 |
| | | | WO 2003-EP50712 | W 20031013 |
| AB Disclosed is an agent which has a destructive effect on malignant tumors and contains alpha-ketoglutaric acid, N-acetyl-seleno-L-methionine, N-acetyl-L-methionine, and a compound that is capable of forming azomethine and is selected among the group 5-hydroxymethylfurfural, dehydroascorbic acid, maltol, and vanillin as an active substance, 5-hydroxymethylfurfural being preferred. The inventive agent can be used in the form of an infusion, in an oral or rectal form of administration, or as an irrigation in cancer therapy. The treatment of cancer patients with the following infusion solution is reported: α -ketoglutaric acid 9.0 g/L; 5-hydroxymethyl furfural 3.0 g/L; N-acetyl-seleno-L-methionine 2.0 mg/L; N-acetyl-L-methionine 100.00 mg/L; glucose 30.0 g/L; sodium and potassium ions to set pH. | | | | |
| REFERENCE COUNT: 4 | THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT | | | |

L5 ANSWER 5 OF 10 CAPLUS COPYRIGHT 2008 ACS on STN
 ACCESSION NUMBER: 2003:909147 CAPLUS
 DOCUMENT NUMBER: 139:369764
 TITLE: Composition for the treatment of alcohol and smoking

dependence using 5-hydroxymethylfurfural-containing
 drinks
 INVENTOR(S): Groke, Karl; Kager, Ernst; Buecherl, Christian
 PATENT ASSIGNEE(S): Austria
 SOURCE: Eur. Pat. Appl., 4 pp.
 CODEN: EPXXDW
 DOCUMENT TYPE: Patent
 LANGUAGE: German
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|--|------|----------|-----------------|------------|
| EP 1362586 | A1 | 20031119 | EP 2003-450035 | 20030205 |
| EP 1362586 | B1 | 20050907 | | |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK | | | | |
| AT 2002000764 | A | 20031015 | AT 2002-764 | 20020517 |
| AT 411730 | B | 20040525 | | |
| AT 303806 | T | 20050915 | AT 2003-450035 | 20030205 |
| ES 2252651 | T3 | 20060516 | ES 2003-450035 | 20030205 |
| CA 2486298 | A1 | 20031127 | CA 2003-2486298 | 20030515 |
| WO 2003097032 | A1 | 20031127 | WO 2003-AT140 | 20030515 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM,
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT,
TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | | |
| RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,
FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR,
BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| AU 2003232906 | A1 | 20031202 | AU 2003-232906 | 20030515 |
| JP 2005228419 | T | 20050922 | JP 2004-505031 | 20030515 |
| US 2005274391 | A1 | 20051215 | US 2005-514775 | 20050113 |
| PRIORITY APPLN. INFO.: | | | AT 2002-764 | A 20020517 |
| | | | EP 2003-450035 | A 20030205 |
| | | | WO 2003-AT140 | W 20030515 |

AB The invention concerns the treatment of alc. and smoking dependence by administering a drink that contains per L (g): α -ketoglutaric acid 4-8; 5-hydroxymethylfurfural 0.2-0.6; saccharose 20-40; sodium bicarbonate 2.5-5.0; sorbic acid 0.3-0.8; optionally citric acid 0.5.

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 6 OF 10 CAPLUS COPYRIGHT 2008 ACS on STN
 ACCESSION NUMBER: 1998:512775 CAPLUS
 DOCUMENT NUMBER: 129:148301
 TITLE: Volatile Compounds Involved in the Aroma of Sweet Fortified Wines (Vins Doux Naturels) from Grenache Noir
 AUTHOR(S): Schneider, R.; Baumes, R.; Bayonove, C.; Razungles, A.
 CORPORATE SOURCE: Laboratoire des Aromes et Substances Naturelles, IPV-ENSAIM-INRA, Montpellier, 34060, Fr.
 SOURCE: Journal of Agricultural and Food Chemistry (1998), 46(8), 3230-3237
 CODEN: JAFCAU; ISSN: 0021-8561
 PUBLISHER: American Chemical Society
 DOCUMENT TYPE: Journal
 LANGUAGE: English

AB A typical com. sample of red Vins Doux Naturels (VDN), Maury 1991, was analyzed by liquid-liquid extraction with dichloromethane followed by chromatog.
anal. by GC/FID, GC/MS, and GC/sniffing. GC/sniffing using a DB-Wax and a DB-5 fused silica capillary column revealed five substances having odors corresponding to the aromas of these sweet fortified wines: an enolic lactone, 3-hydroxy-4,5-dimethyl-2(5H)-furanone or sotolone; an acetal, trans-2-methyl-5-hydroxy-1,3-dioxane; and three Et esters, 4-carbethoxy- γ -butyrolactone, Et 2-hydroxyglutarate, and Et pyroglutamate. The last four compds. were synthesized and their olfactory characteristics checked under the same conditions, which confirmed the odors revealed for the natural compds. except for trans-2-methyl-5-hydroxy-1,3-dioxane, which exhibited no odor. Furthermore, five other sweet fortified wines subjected to different types of oxidative aging were analyzed to quant. determine the four identified aroma compds. The three Et esters were found in these wines at different levels increasing with oxidative aging. However, sotolone could not be detected. In addition, other volatile compds. from the six wines were analyzed. The levels of polar Et esters and the related lactones, the carbonyl compds., and their acetals increased in the wines after oxidative aging as well.

REFERENCE COUNT: 29 THERE ARE 29 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 7 OF 10 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1985:77413 CAPLUS
DOCUMENT NUMBER: 102:77413
ORIGINAL REFERENCE NO.: 102:12135a,12138a
TITLE: Polar carbonyls in cow and buffalo ghee
AUTHOR(S): Rao, D. Vijayender; Ramamurthy, M. K.
CORPORATE SOURCE: Southern Reg. Stn., Natl. Dairy Res. Inst., Bangalore,
560030, India
SOURCE: Indian Journal of Dairy Science (1984), 37(2), 98-102
DOCUMENT TYPE: CODEN: IJDSAI; ISSN: 0019-5146
LANGUAGE: Journal English

AB Polar carbonyls (PC) were isolated as their 2,4-DNP hydrazone from ghee and estimated Ghee prepared at clarification temps. of 100° and 120° for 10 min. contained .apprx.1.9 and 31.5 mg of PC resp. in the case of fresh cream, 6.1 and 75.8 mg in the case of acid cream, and 1.4 and 3.2 mg/100 g ghee in the case of butter. Sepns. of 2,4-DNP hydrazone of total PC of ghee clarified at 100° by TLC showed 6 components. Three of them were tentatively identified as diacetyl [431-03-8], methyl glyoxal [78-98-8], and α -ketoglutaric acid [328-50-7]. The PC of ghee clarified at 120° showed 10 components. Among them, in addition to the 3 above were, furfural [98-01-1] and hydroxy Me furfural [25376-49-2] were also tentatively identified.

L5 ANSWER 8 OF 10 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1984:185071 CAPLUS
DOCUMENT NUMBER: 100:185071
ORIGINAL REFERENCE NO.: 100:28001a,28004a
TITLE: High-performance liquid chromatographic elution behavior of alcohols, aldehydes, ketones, organic acids and carbohydrates on a strong cation-exchange stationary phase
AUTHOR(S): Pecina, R.; Bonn, G.; Burtscher, E.; Bobleter, O.
CORPORATE SOURCE: Inst. Radiochem., Univ. Innsbruck, Innsbruck, Austria
SOURCE: Journal of Chromatography (1984), 287(2), 245-58
DOCUMENT TYPE: CODEN: JOCRAM; ISSN: 0021-9673
LANGUAGE: Journal English

AB The high-performance liquid chromatog. separation of alcs., aldehydes, ketones, carboxylic acids, and carbohydrates on a polystyrene-based strong cation-exchange resin is described. The column temperature was a very important parameter for optimizing sepn's. of these substances. The effect of different functional groups on the elution behavior is discussed.

L5 ANSWER 9 OF 10 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1981:548868 CAPLUS
DOCUMENT NUMBER: 95:148868
ORIGINAL REFERENCE NO.: 95:24905a,24908a
TITLE: Aroma of Balady bread. 1. Determination of carbonyl components
AUTHOR(S): El-Samahy, S. K.; Elias, A. N.; Askar, A.
CORPORATE SOURCE: Fac. Agric., Univ. Zagazig, Zagazig, Egypt
SOURCE: Getreide, Mehl und Brot (1981), 35(7), 182-4
CODEN: GEMBAN; ISSN: 0367-4177
DOCUMENT TYPE: Journal
LANGUAGE: German

AB Balady bread, fermented dough, and dough fresh from mixing were homogenized with H₂O (200 g in 200 mL), extracted with CHCl₃, treated with 2,4-dinitrophenylhydrazine in 2N HCl to derivatize the carbonyls, and the dinitrophenylhydrazones were separated by paper chromatog. The carbonyl compds. were determined by reaction gas chromatog. with α -ketoglutaric acid at 250° to liberate free carbonyls in the precolumn for separation on a 20% Carbowax 20M on Chromosorb P (35-80 mesh) column. Fourteen of the 27 compds. separated were identified, 12 aldehydes and 2 ketones. Most of the carbonyls formed during dough fermentation Two unidentified compds. were >63% of the carbonyls in unfermented dough, one of which increased to 48% of the total and the other nearly disappeared during fermentation; both compds. were absent from bread. The major carbonyls in baked bread were propanal [123-38-6], acetone [67-64-1], and 2-methylpentanal [123-15-9].

L5 ANSWER 10 OF 10 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1964:457866 CAPLUS
DOCUMENT NUMBER: 61:57866
ORIGINAL REFERENCE NO.: 61:10047c-f
TITLE: Determination of furan aldehydes. Reaction with aniline in acetic and hydrochloric acid solutions
AUTHOR(S): Friedemann, Theodore E.; Keegan, Patricia K.; Witt, Norman F.
CORPORATE SOURCE: Univ. of Colorado, Boulder
SOURCE: Analytical Biochemistry (1964), 8(3), 300-11
CODEN: ANBCA2; ISSN: 0003-2697
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable

AB Procedures are described for the spectrophotometric determination of 1-7 γ furfural, methylfurfural (MF), and (hydroxymethyl)furfural (HMF) per ml. solution by a combination of several methods: direct spectrophotometry, mixing equal vols. of sample solution and 10% PhNH₂ in 80% HOAc, and by mixing equal vols. of sample solution and 10% PhNH₂ in .apprx.0.9N excess HCl. Absorbances are determined at specified wavelengths, depending upon the type of sample analyzed. ϵ and λ maximum of furan aldehydes were determined under uniform conditions in 0.001N HCl: furfural, 3.54 + 103 at 229 m μ and 15.375 + 103 at 277 m μ ; MF, 2.98 + 103 at 228 m μ and 16.22 + 103 at 291.5 m μ ; HMF, 3.605 + 103 at 229 m μ and 16.75 + 103 at 284 m μ . Data were obtained under the same uniform conditions on furfuryl alc. furoic acid, furoin, furil, Me₂CO, acetol, methylglyoxal, pyruvic acid, levulinic acid, α -ketoglutaric acid, diacetyl, acetylacetone, and acetonylacetone. None of these compds., even if present in equimolar concentration, except furoin

and acetylacetone, interferes significantly in the determination of furan aldehydes. Reductic acid may interfere. At pH 7.4, ϵ was 20.705 + 103 at λ maximum 281 m μ ; in 0.0002-1.0N acid, ϵ and λ maximum were essentially unchanged, 13.79 + 103 (average) at 263 m μ . Oxidation to dehydroreductive acid completely removes the possible interference. The reaction with 10% PhNH₂ in 80% HOAc is highly sensitive for all 3 aldehydes. Furfural gave no absorption peak in the ultraviolet. The reaction with 10% PhNH₂ in HCl is also highly sensitive, especially for MF. ϵ and λ maximum were: for furfural, 7.575 + 103 352 m μ ; for MF, 11.75 + 103 at 370 m μ ; for HMF, 8.22 + 103 at 363 m μ . A distillation procedure is described for separating furfural and MF from HMF in which 98-99% furfural and MF, and less than 1% HMF, were recovered in the distillate.

=> s methionine (s) (cancer or tumor or neoplasm)
93475 METHIONINE
545 METHIONINES
93665 METHIONINE
(METHIONINE OR METHIONINES)
348164 CANCER
51197 CANCERS
361109 CANCER
(CANCER OR CANCERS)
440912 TUMOR
165946 TUMORS
492219 TUMOR
(TUMOR OR TUMORS)
483382 NEOPLASM
37012 NEOPLASMS
500298 NEOPLASM
(NEOPLASM OR NEOPLASMS)
L6 1415 METHIONINE (S) (CANCER OR TUMOR OR NEOPLASM)

=> s 16 and derivative
56250 DERIVATIVE
352679 DERIVATIVES
404710 DERIVATIVE
(DERIVATIVE OR DERIVATIVES)
656133 DERIV
1168486 DERIVS
1537343 DERIV
(DERIV OR DERIVS)
1642194 DERIVATIVE
(DERIVATIVE OR DERIV)
L7 122 L6 AND DERIVATIVE

=> d scan
L7 122 ANSWERS CAPLUS COPYRIGHT 2008 ACS on STN
IC ICM A61K037-14
INCL 514006000
CC 1-6 (Pharmacology)
Section cross-reference(s): 63
TI Method for the inhibition of the proliferation of cancer cells by injection into the tumor of a selenodithiol
ST selenodithiol cancer treatment; selenodiglutathione lung adenocarcinoma inhibition; neoplasm inhibitor selenodithioli
IT Neoplasm inhibitors
(selenodithiols as)
IT Lung, neoplasm

(adenocarcinoma, inhibitors, selenodithiols)
IT Neoplasm inhibitors
(colon adenocarcinoma, selenodithiols)
IT Intestine, neoplasm
(colon, adenocarcinoma, inhibitors, selenodithiols)
IT Thiols, compounds
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(di-, selenium complexes, neoplasm inhibitors)
IT Neoplasm inhibitors
(glioma, selenodithiols)
IT Skin
(keratinocyte, inhibitors of, selenodithiols as)
IT Neoplasm inhibitors
(lung adenocarcinoma, selenodithiols)
IT Neoplasm inhibitors
(mammary gland adenocarcinoma, selenodithiols)
IT Neoplasm inhibitors
(medulloblastoma, selenodithiols)
IT Brain, neoplasm
(medulloblastoma, inhibitors, selenodithiols)
IT Neoplasm inhibitors
(melanoma, selenodithiols)
IT Mammary gland
(neoplasm, adenocarcinoma, inhibitors, selenodithiols)
IT Neuroglia
(neoplasm, inhibitors, selenodithiols)
IT 63-68-3D, L-Methionine, selenium derivs. 7782-49-2D,
Selenium, methionine derivs. 20710-99-0,
Selenodicycsteine
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(neoplasm inhibitor)
IT 33944-90-0P, Selenodiglutathione
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, for neoplasm inhibitor)
IT 10102-18-8, Sodium selenite
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with reduced glutathione)
IT 70-18-8D, Glutathione, reduced
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with sodium selenite)

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):end

=> d his

(FILE 'HOME' ENTERED AT 09:04:13 ON 20 FEB 2008)

FILE 'REGISTRY' ENTERED AT 09:04:24 ON 20 FEB 2008

FILE 'REGISTRY' ENTERED AT 09:04:55 ON 20 FEB 2008
E HYDROXYMETHYLFURFURAL

L1 2 S E3
E ALPHAKETOGlutARIC
L2 1 S 328-50-7
E DEHYDROASCORBIC
L3 23 S E3

FILE 'CAPLUS' ENTERED AT 09:08:09 ON 20 FEB 2008

L4 1 S (L1 OR HMF OF HYDROXYMETHYLFURFUR?) AND (L2 OR KETOGLUT?) AND
L5 10 S (L1 OR HMF OF HYDROXYMETHYLFURFUR?) AND (L2 OR KETOGLUT?)
L6 1415 S METHIONINE (S) (CANCER OR TUMOR OR NEOPLASM)
L7 122 S L6 AND DERIVATIVE

=> logoff
ALL L# QUERIES AND ANSWER SETS ARE DELETED AT LOGOFF

LOGOFF? (Y)/N/HOLD:y

| COST IN U.S. DOLLARS | SINCE FILE ENTRY | TOTAL SESSION |
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| FULL ESTIMATED COST | 61.99 | 81.26 |
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